LAKE: SOUTH & ROUND PONDS (VLMP 17)
TOWN: GREENWOOD
COUNTY: OXFORD

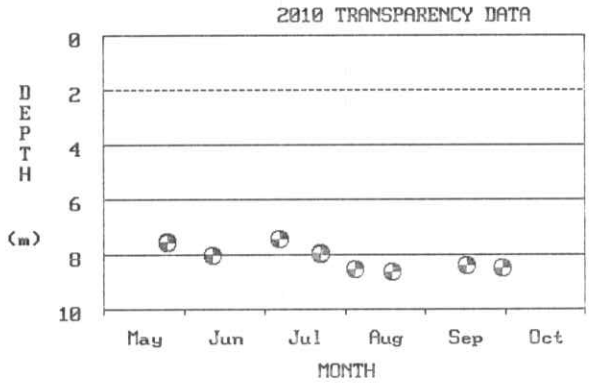
MIDAS: 9683
TRUE BASIN: 1
SAMPLE STATION: 1

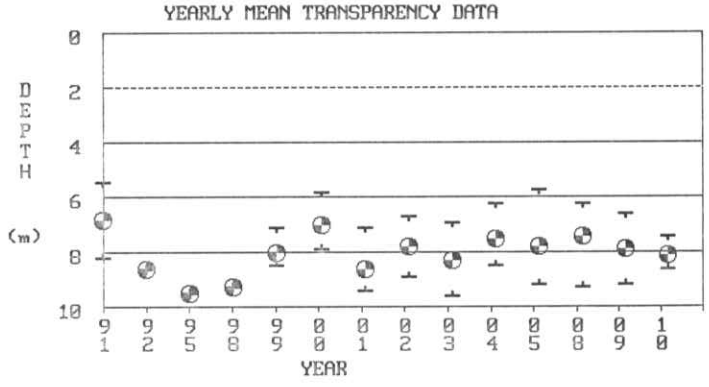
WHOLE LAKE INFORMATION
MAX. DEPTH: 22 m. (71 ft.)
MEAN DEPTH: 6 m. (20 ft.)
DELORME ATLAS #: 10
USGS QUAD: BRYANT POND
IFW REGION A: Sebago Lake (Gray)
IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: 162.0 ha. (400.3 a.)
FLUSHING RATE: 0.45 flushes/yr.
VOLUME: 11860433.9 cu. m. (9621 ac.-ft.)
DIRECT DRAINAGE AREA: 7.73 sq. km. (2.98 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. SOUTH & ROUND PONDS has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1991	-	6.79	4.0	-	7	-	12	-	5.4	6.8	8.2	1	-	-	-	-	-	-	-
1992	-	-	-	-	5	-	11	-	8.6	8.6	8.6	1	-	-	-	-	-	-	-
1995	5	-	5.0	-	3	-	16	-	9.5	9.5	9.5	1	-	-	-	-	-	-	-
1998	12	-	6.0	-	5	-	6	-	9.3	9.3	9.3	1	3.4	3.4	3.4	-	-	-	-
1999	-	-	-	-	-	-	-	-	7.1	8.0	8.5	5	-	-	-	-	-	26	-
2000	-	-	-	-	-	-	-	-	5.8	7.0	7.9	6	-	-	-	-	-	32	-
2001	2	7.20	4.0	-	5	-	-	-	7.1	8.6	9.4	6	2.5	2.5	2.5	-	-	23	-
2002	-	-	-	-	-	-	-	-	6.7	7.8	8.9	6	-	-	-	-	-	27	-
2003	-	-	-	-	-	-	-	-	6.9	8.3	9.6	5	-	-	-	-	-	24	-
2004	-	-	-	-	-	4	-	-	6.2	7.5	8.5	6	-	-	-	-	-	29	-
2005	3	-	5.5	23	4	5	-	-	5.7	7.8	9.2	6	2.6	2.6	2.6	-	-	27	-
2008	8	7.00	5.0	-	5	-	-	-	6.2	7.4	9.3	4	5.8	5.8	5.8	-	-	-	-
2009	-	-	-	-	-	-	-	-	6.6	7.9	9.2	5	-	-	-	-	-	26	-
2010	-	-	-	-	-	-	-	-	7.4	8.1	8.6	5	-	-	-	-	-	25	-
SUMMARY:	6	6.96	4.9	23	5	5	11	-	5.4	8.0	9.6	14	2.5	3.6	5.8	-	-	27	-

LAKE: SOUTH & ROUND PONDS (VLMP 17)
TOWN: GREENWOOD
COUNTY: OXFORD

MIDAS: 9683
*TRUE BASIN: 1
*SAMPLE STATION: 1

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

	SAMPLE DATE													
DEPTH	09/05/91		09/13/93		09/04/95		09/04/98		09/03/01		09/02/05		08/23/08	
m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	22.2	8.2	-	-	20.0	8.6	22.0	8.3	22.1	8.5	22.3	8.7	23.3	8.6
1.0	21.0	8.3	19.3	9.0	20.0	8.6	22.0	8.8	21.7	8.5	22.1	8.7	22.3	8.7
2.0	20.5	8.5	18.9	9.1	20.0	8.6	22.0	8.8	21.6	8.5	21.9	8.7	21.6	8.8
3.0	20.0	8.7	18.9	9.1	20.0	8.6	22.0	8.8	21.6	8.5	21.9	8.7	21.4	8.8
4.0	20.0	8.5	18.8	9.1	19.9	8.6	21.8	8.8	21.5	8.5	21.9	9.1	21.2	8.8
5.0	19.9	8.2	18.7	9.1	19.8	8.6	21.8	8.7	21.5	8.5	21.8	9.0	21.0	8.8
6.0	19.8	7.0	18.7	9.1	19.8	8.6	21.7	8.7	21.4	8.5	21.8	9.1	20.8	8.7
7.0	9.5	6.7	18.7	9.0	19.8	8.6	18.0	10.8	21.2	8.5	17.0	12.3	18.7	9.6
8.0	19.9	9.1	18.1	8.8	19.8	8.6	15.1	11.0	19.4	9.6	13.5	11.4	13.1	9.4
9.0	18.0	9.8	14.7	7.8	16.0	10.6	13.0	4.5	13.6	7.8	11.6	9.2	11.4	8.1
10.0	13.5	8.5	12.0	8.1	12.3	10.2	11.0	4.7	11.5	7.6	10.9	8.9	10.0	7.9
11.0	11.0	8.9	9.8	8.0	11.0	8.4	9.8	6.1	9.6	7.6	10.0	8.5	8.9	8.6
12.0	9.7	7.6	8.7	7.3	10.0	7.3	8.8	6.0	7.9	7.3	9.5	8.2	7.9	8.2
13.0	8.2	6.9	7.8	6.2	9.5	6.2	7.7	5.3	7.1	6.8	8.8	7.7	7.3	7.9
14.0	7.5	6.7	7.0	5.9	9.0	5.6	7.0	4.6	6.6	5.7	8.3	7.0	6.8	7.5
15.0	7.0	5.8	6.8	5.6	9.0	4.7	6.9	3.8	6.3	5.1	7.7	6.5	6.4	6.9
16.0	6.9	5.0	6.3	5.0	8.7	3.4	6.5	3.0	6.1	4.8	7.5	6.4	6.0	5.7
17.0	6.6	4.4	6.0	3.6	8.4	2.0	6.3	1.9	5.9	4.5	7.3	5.8	5.9	5.4
18.0	6.4	3.0	6.0	2.2	8.0	1.0	6.2	1.3	5.8	3.8	7.0	4.4	5.8	5.2
19.0	6.2	1.8	6.0	1.0	8.0	0.3	6.0	0.6	5.8	3.3	6.9	3.8	5.7	4.1
20.0	6.2	0.8	6.0	0.9	8.0	0.0	6.0	0.0	5.7	2.4	6.8	3.3	5.6	3.5
21.0	6.0	0.4	-	-	8.0	0.0	6.0	0.0	-	-	6.7	2.6	5.6	2.9
22.0	-	-	-	-	8.0	0.0	-	-	-	-	-	-	-	-
23.0	-	-	-	-	7.9	0.0	-	-	-	-	-	-	-	-
24.0	-	-	-	-	7.9	0.0	-	-	-	-	-	-	-	-

WATER QUALITY SUMMARY

SOUTH & ROUND PONDS, GREENWOOD
Midas: 9683, Station: 01 - Primary (South Pond, 71' deep spot)

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for South Pond have been collected since 1991. During this period, 5 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of South Pond is considered to be above average, based on measures of SDT, total phosphorus (TP) and Chlorophyll-a (Chla). The potential for nuisance algal blooms on South Pond is moderate.

Water Quality Measures: South Pond is a non-colored lake (average color 3 SPU) with an average SDT of 7.8m (25.6ft). The range of water column TP for South Pond is 3-7 parts per billion (ppb) with an average of 5 ppb, while Chla ranges from 2.5-3.4 ppb with an average of 2.8 ppb. Recent dissolved oxygen (DO) profiles show high DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is moderate. Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: sout9683_01, Revised: 12/006, By: lb

LAKE: SOUTH & ROUND PONDS (VLMP 17)
TOWN: GREENWOOD
COUNTY: OXFORD

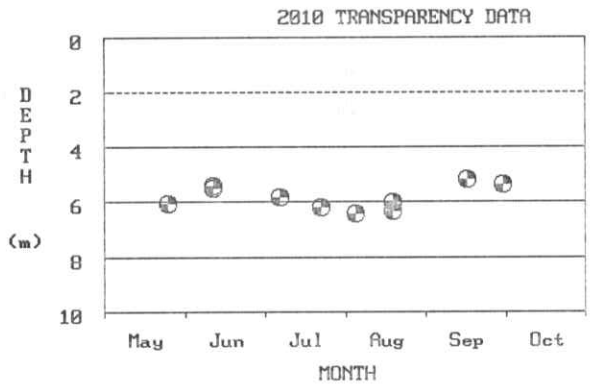
MIDAS: 9683
TRUE BASIN: 1
SAMPLE STATION: 2

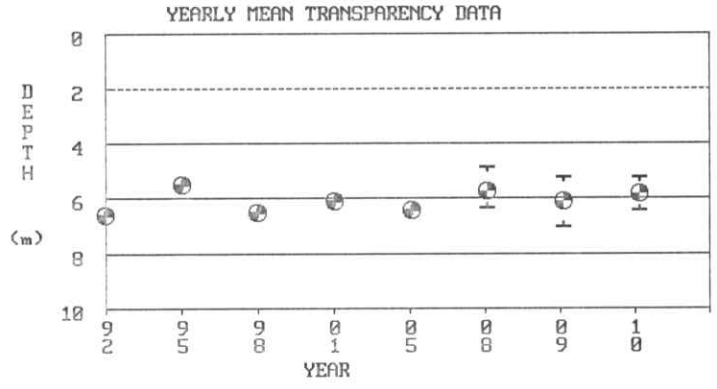
WHOLE LAKE INFORMATION
MAX. DEPTH: 22 m. (71 ft.)
MEAN DEPTH: 6 m. (20 ft.)
DELORME ATLAS #: 10
USGS QUAD: BRYANT POND
IFW REGION A: Sebago Lake (Gray)
IFW FISH. MANAGMENT: Warmwater & Coldwater

TRUE BASIN CHARACTERISTICS
SURFACE AREA: 162.0 ha. (400.3 a.)
FLUSHING RATE: 0.45 flushes/yr.
VOLUME: 11860433.9 cu. m. (9621 ac.-ft.)
DIRECT DRAINAGE AREA: 7.73 sq. km. (2.98 sq. mi.)

PLEASE NOTE THE FOLLOWING: The SAMPLE STATION # refers to the location sampled. The term TRUE BASIN is used to define areas within a lake that are separated by shallow reefs or shoals and therefore function as separate lakes. There are approximately 50 lakes in the state that have more than 1 True Basin. True Basin Characteristics are now being included in the first section of these reports to enable users of the Phosphorous Loading Methodology to better evaluate the data. If there is no data for a particular True Basin, True Basin Characteristics must be obtained from the DEP. SOUTH & ROUND PONDS has 1 True Basin(s).

SECCHI DISK TRANSPARENCY GRAPHS:





Note: 2010 graphs may indicate multiple readings taken on a given day.

SUMMARY OF CHEMICAL AND TROPHIC STATE PARAMETERS:

[* indicates that Secchi disk was visable at bottom of lake (or one reading used in calculation was visable)].

	MEAN COLOR (SPU)	MEAN pH	MEAN ALK (mg/l)	MEAN COND. (uS /cm)	TOTAL PHOS. MEANS (ppb) EPI CORE	SURF GRAB	BOT. GRAB	PRO. GRAB	SECCHI DISK (m.) MIN.	MEAN	MAX.	N	CHLOROPHYLL A(ppb) MIN.	MEAN	MAX.	TROPHIC STATE INDICES EPI PHOS C	G	SEC	CHL
YEAR																			
1992	-	6.70	4.2	-	-	-	-	-	6.6	6.6	6.6	1	-	-	-	-	-	-	-
1995	22	-	-	-	7	-	-	-	5.5	5.5	5.5	1	-	-	-	-	-	-	-
1998	5	-	5.5	-	6	-	9	-	6.5	6.5	6.5	1	2.6	2.6	2.6	-	-	-	-
2001	6	6.80	4.0	-	7	-	12	-	6.1	6.1	6.1	1	4.0	4.0	4.0	-	-	-	-
2005	5	-	5.0	25	7	-	6	-	6.4	6.4	6.4	1	2.0	2.0	2.0	-	-	-	-
2008	10	6.95	7.0	-	17	-	9	-	4.8*	5.7*	6.3*	5	3.9	3.9	3.9	-	-	-	-
2009	-	-	-	-	-	-	-	-	5.2*	6.1*	7.0*	5	-	-	-	-	-	-	-
2010	-	-	-	-	-	-	-	-	5.2*	5.8*	6.4*	5	-	-	-	-	-	-	-
SUMMARY:	10	6.80	5.1	25	9	-	9	-	4.8	6.1*	7.0	8	2.0	3.1	4.0	-	-	-	-

LAKE: SOUTH & ROUND PONDS (VLMP 17)
TOWN: GREENWOOD
COUNTY: OXFORD

MIDAS: 9683
*TRUE BASIN: 1
*SAMPLE STATION: 2

LATE SUMMER TEMPERATURE / DISSOLVED OXYGEN PROFILES:

DEPTH	SAMPLE DATE 09/13/92		09/04/95		09/04/98		09/03/01		09/02/05		08/23/08	
m	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm	°C	ppm
0.0	-	-	20.0	8.1	22.0	8.8	21.6	8.3	22.3	8.9	22.2	8.2
1.0	19.0	8.3	19.9	8.1	22.0	8.2	21.5	8.3	22.3	8.9	22.0	8.2
2.0	18.8	8.4	19.8	8.1	21.9	8.1	21.4	8.3	22.2	8.9	21.9	8.2
3.0	18.7	8.3	19.7	8.1	21.8	8.1	21.4	8.3	22.1	8.8	21.2	8.3
4.0	18.7	8.3	19.5	8.0	21.6	8.1	21.3	8.2	22.0	9.1	20.6	7.7
5.0	18.6	8.2	19.4	7.8	20.5	4.3	21.2	8.2	21.1	7.1	18.9	1.3
6.0	18.0	3.9	19.3	7.4	16.9	0.0	18.7	1.5	16.5	0.8	15.3	0.0
7.0	16.5	0.2	19.0	2.0	14.8	0.0	13.6	0.9	13.4	0.8	13.0	0.0

WATER QUALITY SUMMARY

SOUTH & ROUND PONDS, GREENWOOD
Midas: 9683 Station: 02 - Round Pond (24' deep)

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collaborated in the collection of lake data to evaluate water quality, track algal blooms, and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Round Pond have been collected since 1992. During this period, 4 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Round Pond is considered to be above average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Round Pond is low.

Water Quality Measures: Round Pond is a non-colored lake (average color 14 SPU) with an average SDT of 7.3m (24ft). The range of water column TP for Round Pond is 6-7 parts per billion (ppb) with an average of 7 ppb, while Chla ranges from 2.0-4.0 ppb with an average of 2.9 ppb. Recent dissolved oxygen (DO) profiles show low DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is low. Oxygen levels below 5 parts per million stress certain cold water fish, and a persistent loss of oxygen may eliminate or reduce habitat for sensitive cold water species.

See ME-DEP Explanation of Lake Water Quality Monitoring Report for measured variable explanations. Additional lake information can be found on the Internet at http://www.lakesofmaine.org/ and/or http://www.maine.gov/dep/blwq/lake.htm, or telephone the ME-DEP at 207-287-3901 or the VLMP at 207-783-7733.

Filename: sout9683_02, Revised: 12/06, By: lb